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510(k) Summary of Safety and Effectiveness

This 510(k) summary of safety and effectiveness information is being submitted in accordance with the requirements of SMDA 1990.

## Submitter's Information

Mr. Hunpyo Hong  
Chief Technology Officer and President  
CYMED Engineering Inc.  
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Bangyi-Dong. Songpa-Ku,  
SEOUL, KOREA  
TEL: 82-2-425-3711

## Trade Name, Common Name and Classification

Trade Name:	ESSEN PACS™
Common Name:	Picture Archiving Communications System
Device Classification:	892.2050 LLZ
Name:	System, Image Processing

## Predicate Device

Manufacturer :	INFINITT CO., LTD.
Device :	STARPACS™
510(k) Number :	K011013
Date Received :	03/31/2003
Decision Date :	04/17/2003
Decision :	Substantially Equivalent
Panel Code device reviewed by :	Radiology
Panel Code device classified by :	Radiology
Product Code :	LLZ
Classification :	Class II -- 892.2050 LLZ

## Device Description

ESSEN PACS is a DICOM-compliant and server/client architectural software application. It is a distributed image management system that manages the viewing, retrieval, manipulation, and distribution of medical images within a Picture Archiving and Communication System (PACS) environment. ESSEN PACS is implemented on base of the Digital Imaging and Communication in Medicine (DICOM) standard. Therefore, the system provides communications of images and relevant information such as patient demographics and examination data between DICOM-compliant imaging devices and itself.

**Indications for Use**

ESSENPACS is a software package intended for acquisition, processing, archiving, transmitting and viewing DICOM Compliant medical images (including mammographic images). It receives digital images and data from various sources (including CT scanners, MR scanners, ultrasound systems, R/F Units, computed & direct radiographic devices, secondary capture devices, scanners, imaging gateways or other imaging sources). Images and data can be stored, communicated, processed and displayed within the system and or across computer networks at distributed locations.

Lossy compressed or digitized screen film mammographic images must not be reviewed for primary image interpretations. Mammographic images may only be interpreted using a FDA approved monitor that offers at least 5 Mpixel resolutions and other technical specifications reviewed and accepted by FDA. Typical users of this system are trained professionals, including physicians, nurses, and technicians.

**Technological Characteristics**

ESSENPACS is software application used for handing images and relevant information. The device does not contact the patient, nor does it control any life sustaining devices. A physician, providing ample opportunity for competent human intervention interprets images and information being displayed and printed.

**Conclusion:**

The 510(k) Pre-Market Notification for ESSENPACS <sup>TM</sup> contains adequate information and data to enable FDA - CDRH to determine substantial equivalence to the predicate device.

ESSENPACS <sup>TM</sup> will be manufactured in accordance with the voluntary standards listed in the enclosed voluntary standard survey. The submission contains the results of a hazard analysis and the "Level of Concern for potential hazards has been classified as "minor".



Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

MAY 12 2005

Cymed Engineering, Inc.  
c/o Mr. Daniel W. Lehtonen  
Responsible Third Party Official  
Intertek Testing Services NA, Inc.  
70 Codman Hill Road  
BOXBOROUGH MA 01719

Re: K051081  
Trade/Device Name: ESSENPAACS™  
Regulation Number: 21 CFR §892.2050  
Regulation Name: Picture archiving and communications system  
Regulatory Class: II  
Product Code: LLZ  
Dated: April 25, 2005  
Received: April 27, 2005

Dear Mr. Lehtonen:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

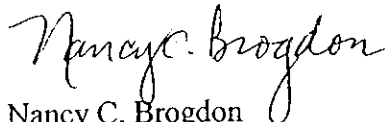
This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at one of the following numbers, based on the regulation number at the top of this letter:

21 CFR 876.xxxx	(Gastroenterology/Renal/Urology)	240-276-0115
21 CFR 884.xxxx	(Obstetrics/Gynecology)	240-276-0115
21 CFR 892.xxxx	(Radiology)	240-276-0120
Other		240-276-0100

Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/dsma/dsmamain.html>

Sincerely yours,



Nancy C. Brogdon  
Director, Division of Reproductive,  
Abdominal, and Radiological Devices  
Office of Device Evaluation  
Center for Devices and Radiological Health

Enclosure

510(k) Number: K051081

Device Name: ESSEN PACS <sup>TM</sup>

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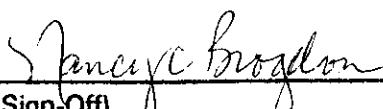
Lossy compressed or digitized screen film mammographic images must not be reviewed for primary image interpretations. Mammographic images may only be interpreted using a FDA approved monitor that offers at least 5 Mpixel resolutions and other technical specifications reviewed and accepted by FDA.

Typical users of this system are trained professionals, including physicians, nurses, and technicians.

Prescription Use XX AND/OR Over-The-Counter Use \_\_\_\_\_  
(Part 21 CFR 801 Subpart D) (21 CFR 807 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

  
(Division Sign-Off)  
Division of Reproductive, Abdominal,  
and Radiological Devices  
510(k) Number K051081